Title (en)

RECOMBINANT APOLIPOPROTEINS AND METHODS.

Title (de)

REKOMBINANTE APOLIPOPROTEINE UND VERFAHREN.

Title (fr)

APOLIPOPROTEINES RECOMBINANTES ET PROCEDES.

Publication

EP 0239631 A4 19890112 (EN)

Application

EP 86906545 A 19861002

Priority

- US 78441885 A 19851004
- US 80469285 A 19851204

Abstract (en)

[origin: WO8702062A1] A method of producing a purified lipid-binding peptide which can bind to phospholipids at one or more amphipatic alpha-helical peptide regions. The method includes providing a gene coding for the peptide, and introducing the gene in expressible, heterologous form in a suitable expression system capable of synthesizing a mixture of peptides which includes the lipid-binding peptide. Addition of either endogenous or exogenous lipids to the peptide mixture forms a low-density lipopeptide complex composed of lipid and the lipid-binding peptide, and this complex can be separated easily from nonlipid-binding peptides in the peptide on the basis of its size and/or density. The method is intended particularly for scaled-up production of purified human apolipoproteins and their alpha-helical lipid-binding regions. Also disclosed are related methods for producing recombinant apolipoproteins, therapeutic lipopeptide compositions, and a stabilized lipid emulsion for nutritional therapy. Further disclosed are methods for expressing apolipoproteins or lipid-binding segments thereof in bacterial, yeast and mammalian cell expression systems, and methods for purifying lipid binding proteins, including fused recombinant proteins.

IPC 1-7

C12P 21/00; C12N 15/00; A61K 37/02; C07K 13/00; C07H 17/00

IPC 8 full level

A61K 31/00 (2006.01); **C07K 14/775** (2006.01); **C12N 15/62** (2006.01); **C12N 15/85** (2006.01); **C12P 21/02** (2006.01)

CPC (source: EP)

A61K 31/00 (2013.01); **C07K 14/775** (2013.01); **C12N 15/62** (2013.01); **C12N 15/85** (2013.01); **C12P 21/02** (2013.01); C07K 2319/00 (2013.01); C07K 2319/02 (2013.01); C07K 2319/75 (2013.01)

Citation (search report)

- [XP] WO 8604920 A1 19860828 - BIOTECH RES PARTNERS LTD [US]
- [E] WO 8702061 A1 19870409 - BIOTECH RES PARTNERS LTD [US]
- [A] EP 0173280 A1 19860305 - BIO TECHNOLOGY GENERAL CORP [US]
- [XP] PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCE, USA, vol. 83, March 1986, pages 1467-1471, Washington, DC, US; A.A. PROTTER et al.: "Isolation of a cDNA clone encoding the amino-terminal region of human apolipoprotein B"
- [T] JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 262, no. 9, March 1987, pages 4241-4247, The American Society of Biological Chemists, Inc., Washington, DC, US; J. BEDNARZ MALLORY et al.: "Expression and characterization of human apolipoprotein A-I in Chinese hamster ovary cells"
- [X] JOURNAL OF MEDICINAL CHEMISTRY, vol. 25, no. 10, October 1982, pages 1115-1120, American Chemical Society, Washington, DC, US; R.E. COUNSELL et al.: "Lipoproteins as potential site-specific delivery systems for diagnostic and therapeutic agents"
- See references of WO 8702062A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 8702062 A1 19870409; AU 6522486 A 19870424; EP 0239631 A1 19871007; EP 0239631 A4 19890112

DOCDB simple family (application)

US 8602075 W 19861002; AU 6522486 A 19861002; EP 86906545 A 19861002